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FEB 7 - 1997

February 7, 1997

Mr. William F. Caton Secretary Federal Communications Commission Room 222 1919 M St., NW Washington, DC 20554

RE: IB Docket No. 96-261 In the Matter of International Settlement Rates Notice of Proposed Rulemaking

Dear Mr. Caton:

Enclosed for filing with the Commission are an original and four copies of the comments of the Economic Strategy Institute regarding the above proceeding. In addition, we are enclosing two original studies (five copies each) written for this proceeding and copies of a letter from Dr. Lawrence Chimerine, Managing Director of the Economic Strategy Institute, to Chairman Reed Hundt.

Respectfully submitted,

Erik R. Olbeter

Director, Advanced Telecom and Information

Technology Program, ESI

Enclosures

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Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

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COMMENTS OF THE ECONOMIC STRATEGY INSTITUTE

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February 7, 1997

In the Matter of

International Settlement Rates

In this Notice of Proposed Rulemaking, the Federal Communications Commission requests comments on measures to protect American consumers and firms from the anti-competitive abuses of foreign firms with dominant market power in their home market. The Economic Strategy Institute applauds this measure and has submitted for your consideration two new studies titled, "Reforming the Accounting Rate Regime: An Analysis of the Economic Benefits of Reform and the Dangers of Delay", and "Competition in International Message Telephone Service: An Economic Analysis of Price Squeezes and their Implications for International Settlement Rates and for Rules on Foreign Entry into the U.S. Communications Market".

This Economic Strategy Institute (ESI) study of price squeezes – along with its companion piece entitled "Reforming the Accounting Rate Regime" – is intended to explore a number of questions raised by the NPRM. The NPRM asks how the FCC should address potential anticompetitive activities of foreign operators offering International Message Telephone Service (IMTS) in the United States. This study demonstrates that anticompetitive behavior in IMTS is a real and immediate threat, particularly because U.S. firms are facing competition from large, and integrated, foreign monopolies.

More specifically, this study investigates how the FCC can ensure that competitors will act fairly in a new competitive environment. Ideally, the players will compete on a level playing field, with no firms holding the upper hand. In the real world, however, the firms that are competing for global communications business are very large and are accustomed to exerting substantial power in the marketplace. Considering how lucrative are the market opportunities up for grabs, the competition for domestic and international business may be more combative than expected. The rules should be clear, and they should also be forceful.

The price squeeze cases that the Economic Strategy Institute reviews in this paper clearly show that price squeeze behavior is a serious and eminent threat to the U.S. telecommunications market. Therefore, we conclude that the FCC must consider imposing regulations on settlement rates to ensure a vibrant, competitive and fair international telecommunications market. These regulations must go beyond traditional remedies and be based on true long run incremental costs (LRIC) methodology.

LRIC settlement benchmarks are a necessary requirement for foreign firms seeking entry into the U.S. market. Benchmark ranges are insufficient to protect the U.S. market from anticompetitive behavior if the ceiling is above-LRIC. Because the range of permissible prices that an international carrier can set may be quite wide, there is a large area for potential abuse.

Notably, a foreign firm could obey all benchmarking requirements and then cut its prices for international traffic to specific destinations. This would undercut the business of U.S. firms that follow reasonable accounting rules in setting their rates for these destinations. As a result, U.S. firms could face anticompetitive actions by foreign carriers although these carriers have met

benchmarks set by the Commission. In addition, a foreign carrier may have greater incentive to use a price squeeze if it can benefit from transfer pricing.

Thus, benchmarking sets a necessary but not sufficient requirement for competition. It only addresses part of the issue of competitive behavior that the FCC hopes to address through its guidelines. If the FCC hopes to limit the use of anticompetitive behavior by foreign carriers, including price squeezes, additional steps should be taken. The FCC should monitor IMTS price changes of all firms with the power to practice the price squeeze. If evidence exists that the IMTS price of a U.S.-affiliate of a foreign firm is below the costs incurred by all other firms on that route (including the settlement payment) then the FCC should consider disallowing that price change.

As this paper notes, a price squeeze may benefit consumers in the short run by reducing rates for some international calls. Nevertheless, it would be harmful to U.S. interests over the long run, especially if U.S. operators were unable to respond to such anticompetitive actions. This review suggests that there is an additional motivation for an international telecommunications company to use a price squeeze, transfer pricing. With transfer pricing, a parent firm could charge some of its costs of research and development, new investment, and other services to a U.S. branch or affiliate. This would reduce the profitability of an entity in the United States¹ and strengthen the competitive position of its parent.

On the other hand, some firms might use transfer pricing to increase the funds a U.S. affiliate could use to expand its operations, acting as a cash infusion. In the case of oligopolistic international markets, firms can couple transfer pricing with a price squeeze. Thus, regulators and policy makers should examine transfer pricing in a broader context, particularly for firms that operate in communications where market power is a key competitive strength. U.S. regulators should not regard transfer pricing as a phenomenon limited to developing nations.

While recent research on transfer pricing does not include many cases of its use between developed nations, Anita M. Benvignati does note that transfer pricing is likely to be more problematic for government officials. This is largely due to the fact that foreign transfers are more frequently priced on a non-market basis than domestic transfers by large firms included in a sample reporting to the U.S. Federal Trade Commission in the mid 1970s. See Anita M. Benvignati, "An Empirical Investigation of International Transfer Pricing by US Manufacturing Firms," in Rugman and Eden, Multinationals and Transfer Pricing, 1985, pp. 193-211.

This review of price squeeze and transfer pricing literature suggests that a foreign-owned telecommunications subsidiary operating in the U.S. economy could have a significant anticompetitive impact by using a price squeeze. This analysis asserts that the FCC needs to view a price squeeze in a larger context. It may have important implications for the way that large, vertically integrated telecommunications firms exert market power in the U.S. and world economies.

Just as the FCC is taking proactive measures to avert the possibility of cross-subsidization and price squeezing in the intra-Lata market, it should enact policies that eliminate the potential for price squeezing in the international services market while allowing the industry to develop according to market forces.

A comprehensive WTO agreement will not suffice to eliminate the potential for price squeeze behavior in the U.S. market. Firms with dominant market power in their home market will continue to generate revenue from above-cost accounting rates and have the ability to apply them to their U.S. subsidiaries. Once international facilities markets are competitive, these regulations shall have exhausted their usefullness. Until that time, they are vital to consumers and to the development of competitive markets in the United States.

We believe that the FCC should adopt a country-specific benchmark ceiling for all countries that is not significantly greater than nine cents (a conservative estimate of average cost), and which declines in tandem with associated costs decreases. This benchmark should go into effect as soon as possible and no later than the beginning of 1998 as any delay would sanction foreign monopolies and governments to extract money from U.S. consumers and to slow the development of competitive telecommunications markets. Firms that refuse to enter into agreements at the Commission benchmark should be automatically moved to an "off-the shelf" cost-based accounting rate that are actually below the benchmark.

Above-cost accounting rates are a direct and unacceptable drain on U.S. resources and an unnecessary burden placed on U.S. consumers. If they are allowed to persist unfettered, they will be the instrument employed by foreign firms to practice anticompetitive behavior in the U.S. market, further harming consumers and impeding the development of healthy competition.

In addition to the above comments and the arguments put forth in the two studies, we also include the following comments on specific concerns raised by the Commission in the Notice:

Para. 75. One part of this paragraph seeks comments on the International Bureau's hopes of taking "into account the level of competitive risk posed by above-cost settlement rates in enforcing our settlement rate benchmarks." This paragraph notes that "there is great potential for distortion flowing from above-cost settlement rates when a foreign carrier collecting those rates is able to send its switched service over resold international private lines into the United States, but U.S. carriers are unable to send their traffic over private lines in the reverse."

This illustrates a major shortcoming in the benchmarking approach that the International Bureau is proposing to use for settlement rates and international tariffs. If a foreign carrier pledges to narrow the "settlement gap," open its markets to competition and set fair tariffs in the U.S. market for services to its home country, it can establish an affiliate or other presence in the U.S. IMTS market. Once it enters, however, not all of the pledges that were initially made might be kept. In addition, the U.S. affiliate might behave in an anticompetitive manner.

This could create a major quandary for the International Bureau if it relies on the benchmarks as they have been proposed. If benchmarkers are one-third below the usual international rates of about 35 cents to many developing nations, many assume that a reasonable rate under the new benchmark system would be for a foreign carrier to set rates in the 21 cent to 25 cent range. There is ample room in this rate for the foreign carrier to cut prices significantly more substantially, perhaps to as low as 9 cents to 13 cents. Under these terms, many U.S. carriers would lose nearly all of their traffic to the foreign carrier if they did not bring their rates close to the level the foreign carrier charges. The foreign carrier would have several benefits. It would still be able to charge monopoly rates that could be kept artificially high. In addition, its subsidiary in the U.S. market would be able to establish itself as a very competitive entity for traffic to the market that its parent dominated.

The real risk in the medium and long-term impact of such behavior by a number of carriers from developing nations on the economic status of U.S. firms in the marketplace. An effective foreign carrier would undermine the ability of U.S. carriers to compete in a number of important IMTS markets by pricing below the cost of offering services. The foreign carriers might follow this

strategy to drive the U.S. carriers out of this area of business, but then might raise their rates once the U.S. firms had left. This would reduce competition in the IMTS market, increase the dependency of U.S. carriers on other markets for their profitability, possibly reducing competition and investment in new services and equipment, and result in higher rates fort U.S. consumers after an initial period of rather low rates. In addition, there is no guarantee that the International Bureau would be able to ensure that the conditions that the conditions the foreign carrier had pledged to meet in its home market would be met. The foreign carrier might continue to have an effective monopoly in its home market and to benefit from above-cost settlement rates. It might even use transfer pricing to undertake indirect transfers of funds to its U.S. affiliate, providing the affiliate with the resources to finance its losses while the affiliate is offering below cost pricing to U.S. consumers.

In the last part of this paragraph, the International Bureau notes that its concerns about anticompetitive behavior would be "significantly diminished" if a foreign monopoly's "ability to collect above-cost settlement rates is constrained by the existence of effective competition in its home market" or if it is "collecting cost-based settlement rates." This may be true, but to have confidence in this statement, the International Bureau would have to certify that: 1. It would adequately measure the extent of competition; 2. The competition was having an impact on the setting of settlement rates -- two or three players in the market might all benefit if the settlement rates are above-cost, not just one; and 3. Settlement rates were based on costs not established in a way that encourages calculations that include bogus ways of inflating costs. Because many of these conditions would require that the International Bureau has absolute confidence in the accounting and cost measurement procedures of foreign carriers and/or their government, it may find that they are difficult, it not impossible, to meet.

Para. 76. With this paragraph, the International Bureau sets forth a number of conditions that it proposes to impose on "authorizations to provide U.S. international services." One of the first is to offer "U.S. licensed international carriers a settlement rate within the benchmark ranges." The second condition is that if a foreign carrier's actions distort market performance on a route in question, "settlement rates [would] be reduced to the bottom of the range (our estimate of cost-based termination) or ... [we would] revoke the authorization of the carrier to serve the affiliated market. "These actions are commendable, but they might leave room for a foreign carrier to act in an anticompetitive manner. First, a foreign carrier could offer U.S. licensed international

carriers a settlement rate within the benchmark range if the range were high enough to permit the foreign carrier to continue to obtain above-cost settlement rates (in excess of cost-based termination). Second, the International Bureau has not set a clear standard to define what actions of a foreign carrier would "distort market performance" on a route. If the foreign monopoly shares the route with only a few U.S. licensed carriers, they might cooperate to keep the price high. On the other hand, if the foreign carrier offered U.S. customers below-cost tariffs, there is no way for the International Bureau to ascertain a measure anticompetitive behavior.

If the International Bureau want to pursue this it should create a series of cost estimates for terminating IMTS traffic to specific nations. If a foreign carrier offered rates near or below these costs, it could rule that they are acting in an anticompetitive manner. It might also establish other guidelines to define competitive behavior in the IMTS marketplace. These could include no special treatment to any type of distributors or retailers to bring customers to the foreign carrier, no special financing of the distributors or retailers, no special advertising campaigns to undercut competitors in the market and no steps to make it difficult or more costly for U.S. carriers to provide services to these markets.

Para. 77. This paragraph seeks comments on "what mechanism or approach we [The International Bureau] should use to determine when there has been a distortion of competition in the IMTS market." The paper that the Economic Strategy Institute is submitting as part of its comments on this NPRM examines several cases where prices squeezes have been used to reduce the competitive position of rivals in key industries. Some of the mechanisms described in the paper that ought to be taken into consideration by the International Bureau in setting up mechanisms to measure anticompetitive behavior should include: 1. pricing services at or below costs; 2. providing suppliers or distributors with special rates, concessions or benefits to enlarge the market for the (foreign) carrier; and 3. advertising and financing mechanisms that also broaden demand when a carrier is pricing at or below cost.

In addition, any efforts to distort traffic flows, including those named above, should be considered to be anticompetitive. The Commission's reporting system will need to require reporting of tariffs that are set for IMTS markets. As noted in paragraph 76, the Commission may also want to evaluate whether private line service rates are part of the anticompetitive behavior. Since reporting requirements for areas in this area may have been reduced recently,

the Commission may need to reinstitute comprehensive reporting for pricing such services to a large number of countries.

The Commission may also want to seek bilateral agreements with certain developing nations that would cover reporting of competition in IMTS markets in the developing country and the United States. This could best be done in collaboration with the Office of the Special Trade Representative, so that the Commission's efforts comply with any requirements of international trade agreements signed by the United States government.

Para. 78. This paragraph seeks comment on how the benchmarking proposal would effect the effective competitive opportunities (ECO) test. Viewed in light of the issue of anticompetitive behavior, the ECO test and the benchmarking proposals can serve as useful, but preliminary screens. In order to address anticompetitive behavior, the Commission needs to be able to screen pricing in IMTS markets and in markets for private lines for those nations whose carriers are permitted to operate in the United States. At present, this is not part of the ECO test or the benchmarking proposal. The Commission would need to supplement these with additional reporting and performance requirements. It might also have to find another way to ensure that no anticompetitive behavior is taking place, such as permitting U.S. operators to have a quick and reliable way of challenging the pricing of foreign competitors in IMTS markets if they believe that its rivals' prices are below cost or rely upon unusual concessions. A procedure that the Commission could use to evaluate the rule on such complaints rapidly would answer this requirement. It would probably require additional staffing at the Commission if the number of challenges to pricing that are expected to occur.

Para. 79. The Commission hopes "all U.S. - licensed carriers (U.S. or foreign-owned) would face similar conditions on service to affiliated foreign markets. "This is a useful goal, but the ECO test and benchmarking leave open an enormous area for anticompetitive behavior. Several proposed ways to do this are mentioned in the discussion above and in the comments submitted on the NPRM.

Para. 80. This paragraph seeks to know whether it is really necessary to apply a rule of "similar conditions on service to affiliated foreign markets" (para. 79). The Commission's NPRM raises the point that there might be "opportunity costs to the foreign parent of offering service through

affiliate in competition with U.S. carriers that formerly purchased termination service from the parent." The foreign carrier, by offering service through its affiliate to its home market would lose the settlement payments that is formerly received from U.S. carriers. The commission seeks comment on this analysis. We find that the opportunity cost might not be great. The settlement payments lost could be offset, to a large degree, by the U.S. business that is gained. They might also be supplemented by additional traffic from the foreign market because the increase in calls from the U.S. to the foreign market. Any losses from settlement payments might also be supplemented by sales of additional services, such as private lines. Obtaining a business presence in the large U.S. market would also be a great benefit to a foreign carrier.

The commission also seeks comment on whether the "foreign carrier has the incentive or ability to use above-cost settlement rates to cross-subsidize a U.S. affiliate. "The foreign carrier would have an incentive to use above settlement rates to subsidize its U.S. affiliate because it would want to build it into a competitive force in the U.S. market. The above-cost settlement rates are one way it could obtain the resources to do this, but it might also do so through transfer pricing, lending and other indirect mechanisms. These would be activities that the Commission would need to know about if it wanted to see how foreign carriers behave once they are permitted to operate in the U.S. market.

Para. 81. This paragraph notes that the Commission is considering an additional to it s present rules on the resale of international private lines to provide switched service. The Commission notes that it plans to add settlement rate conditions to the resale requirements. We believe that this is a fair addition. On the other hand, it is a necessary, but not sufficient, requirement for dealing with anticompetitive behavior. The Commission should establish additional requirements once foreign carriers meet the resale requirements and the benchmarking requirements, so that anticompetitive behavior can be watched for . This include monitoring tariffs and an ability to question the fairness of tariffs that appear to be below or near cost.

Para. 82. This paragraph opens the issue of international private line resale. The Commission proposes granting resale applications to foreign carriers it their accounting rates on the route or routes in question are "within the benchmark range." This proposal would be a useful one if the benchmark had a narrow range and if there were safeguards against anticompetitive behavior by foreign carriers. The Commission should revise the benchmark proposals so that there is only

one benchmark level of prices. The Commission should also add mechanisms to ensure that there is no anticompetitive behavior by foreign entities offering either IMTS or resale services.

Para. 83. The penalty the Commission proposes for the distortion of the market is to force all international carriers to pay settlement rates at the low end of the benchmark range. While this would have some effect, it might not prove sufficient to cope with anticompetitive behavior. The danger is that foreign carriers will cut prices far below established settlement rates if they want to capture a large share of the U.S. IMTS market for their home country. For this type of activity, forcing everyone to price at the low end of the benchmark rates would not be much of a remedy. The main response could be to limit or rescind the permission granted to a foreign carrier that operates in an anticompetitive way. This might be accompanied by fines or limits on offering other services, such as international resale.

A major deterrent to anticompetitive would be for the Commission to set our a range of rather harsh penalties that would be incurred if a foreign carrier was found to be acting in an anticompetitive fashion. It may be theoretically correct to assume that if competition in foreign markets increased, there would be adequate pressure placed on foreign carriers operating in the U.S. IMTS markets to make them behave competitively. This assumption may not work in reality. Foreign carries have many incentives to behave in a way that captures a large part of the U.S. - based traffic bound for their home nation, particularly when their parent still dominates the home market and can charge far above cost settlement rates.

Para. 84. The Commission seeks comments on how it should set accounting rates. It should be more beneficial to set these rates at the very lowest end to begin with, since this would reduce the likelihood that a firm would adhere to a broad benchmark and then price very aggressively. It would also be best to see the new requirements forming a triumvirate of: 1. The ECO test to create a way of insuring fair bilateral treatment; 2. Benchmarking test to address imbalances in accounting settlement rates; and 3. Oversight and enforcement measure to insure that foreign carriers do not act in an anticompetitive fashion once they are operating in the United States.

Para. 85. The Commission seeks to "presume that carriers from countries that have opened their markets to meaningful competition have fulfilled these conditions" (i.e., that settlement rates are set at cost-based levels). In this case, the Commission needs to define "meaningful competition"

very precisely. If the definition means a mere opening of the market to competitors, then the presumption of competition is naïve. Under this condition, the market could be open, but the main operator in the country could still monopolize most or nearly all services. If "meaningful competition" means setting settlement rates at cost-based levels, that would be a good presumption. The Commission, however, would need to have excellent rates at cost-based levels. The books could easily be "cooked," adjusted, or amended to make a presumption of competition meaningless.

Thus, an ECO test is needed, but so is far better information about how accounting is done for communications costs I the economies where the Commission is expecting more competition to take place.

Para. 86. With an international agreement on liberalizing trade in basic telecommunications service, so of the safeguards discussed here, such as the ECO test, would no longer be needed. Setting benchmarks for entry into the U.S. market might be regarded as a special treatment, if there were three levels of benchmarks, but possibly not be seen as contravening a trade agreement if there was only range of benchmarks. Other safeguards, such as those against anticompetitive behavior, would probably not contravene international agreements if they applied to firms operating in the U.S. market an did not include penalties imposed upon operations of parent firms operating in foreign markets.

Reforming the Accounting Rate Regime

An Analysis of the Economic Benefits of Reform and the Dangers of Delay

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Director, ESI Advanced Telecom and Information Technology Program

February 1997

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Table of Contents

TABLE OF CONTENTS	3
EXECUTIVE SUMMARY	5
THE ACCOUNTING RATE REGIME	6
THE POTENTIAL FOR PRICE SQUEEZE BEHAVIOR THROUGH THE INTERNATIONAL MARKET	7
THE BENEFITS OF COST-BASED BENCHMARKING	8
POLICY RECOMMENDATIONS	9
INTRODUCTION	11
THE INTERNATIONAL TELECOM MARKET AND THE ROLE OF ACCOUNTING RA	ATES 13
CHANGING MARKET DYNAMICS	13
THE INTERNATIONAL SETTLEMENT SYSTEM	
Imbalances in Traffic Flows	15
Growing US Net Settlement Outpayments	17
Proliferation of Above-Cost Accounting Rates	18
The Above-Cost Component of the Accounting Rate Charge	21
Non-Cost Justified Settlement Payments	22
Conclusion	23
ANTICOMPETITIVE CONSIDERATIONS OF ABOVE-COST ACCOUNTING RA	TES: THE
POTENTIAL FOR PRICE SQUEEZE	25
DEFINING THE PRICE SQUEEZE	25
PRICE SQUEEZE IN INTRA-LATA SERVICES – CC DOCKET NO. 96-149	26
The Argument for Anti-Competitive Safeguards	20
The Common Carrier Final Rulemaking	28
PRICE SQUEEZE IN INTERNATIONAL SERVICES VIA THE ACCOUNTING RATE	29
CURRENT MARKET ENTRY AND ACCOUNTING RATE POLICIES	31
FCC RECULATIONS OF FOREIGN MARKET ENTRY	3

4 • Reforming the Accounting Rate Regime

The Legality Test	32	
The ECO Test	33	
Specified Public Interest Factors	34	
FCC REGULATIONS OF INTERNATIONAL SETTLEMENT RATES	35	
CONCLUSION: ABILITY OF CURRENT REGULATIONS TO COUNTER THE PRICE SQUEEZE		
SCENARIO-BASED FORECASTING: CURRENT POLICIES VS. COST-BASED A	CCOUNTING	
RATES	39	
BASIS FOR SCENARIO-BASED MODELS	39	
MEASURING COMPETITION	40	
DETERMINING COST-BASED LRIC	41	
DIFFERENT IMPUTED ASSUMPTIONS OF SCENARIOS	43	
Scenario One: Accelerated Competition without Cost-Based Benchmarking	43	
Scenario Two: Accelerated Competition with Cost-Based Benchmarking	48	
Scenario Three: Gradual Competition Without Cost-Based Benchmarking	53	
Scenario Four: Gradual Competition with Cost-Based Benchmarking	56	
BENEFITS OF LRIC-BASED ACCOUNTING RATES	59	
Lower Trade Deficits	62	
More Investment in the United States	62	
Lower Prices in International Telecom	63	
Lower Prices in All Telecom Services	63	
A More Competitive U.S. Economy	64	
POLICY RECOMMENDATIONS	65	
DETERMINING "COST-BASED" RATES	65	
THE MYTH OF A TRANSITION PERIOD	66	
Enforcement Mechanisms	67	
POLICY ACTION IN LIEU OF A WTO NEGOTIATIONS	67	
CONCLUSIONS	69	
APPENDIX A: SCENARIO BASED FORECASTING METHODOLOGY	71	
WEIGHTED ACCOUNTING RATE	71	
ASSUMPTIONS USED TO ESTIMATE DEMAND AND TRAFFIC FORECASTS	73	

Executive Summary

The world is in the midst of an information revolution. While this phrase is overused, and at times misapplied, the convergence of computer and communications industries presents the greatest opportunities for societal and industrial advance since the industrial revolution. It continues to provide significant increases in productivity and efficiency, to spawn new industries, and to encourage a greater flow of ideas. Information, and information management, is rapidly becoming the crucial component of America's competitiveness in the global marketplace.

Regulators around the globe are in the process of devising policies to maximize the benefits of this revolution. This is not to say that deregulation alone is the best policy. On the contrary, most countries maintain national monopolies that will exhibit significant market power for the future. Regulations need to recognize the ability of these firms – both in the United States and abroad – to unduly deter competition through anticompetitive behavior.

The international market for telecommunications services is in flux both on the supply and demand side. More users are insisting on low cost, high-quality seamless networks. Suppliers are finding innovative ways to avoid traditional regulatory structures that promote high tariffs. While more recent services and arrangements (international simple resale, switched resellers, global alliances, etc.) are challenging traditional pricing and service arrangements, the public switched telephone network and hence, accounting rates, are and will remain the most important arrangement for carrying international telephony services. With its demise in doubt, regulators need to determine how to best ensure the accounting rate regime is not manipulated to harm U.S. consumers.

This paper explores current U.S. regulations on the international telecom market and foreign market entry policies. Traffic flows and cross-country mergers are skyrocketing. As a result, now more than ever, these policies are crucial to the development of a competitive telecom sector. Specifically, it reviews the accounting rate mechanism and the potential for foreign firms with significant market power at home to practice anticompetitive activity, such as the price squeezing, through its foreign affiliates. While this paper focuses on the United States, it argues that the price squeeze is a problem all countries with competitive

telecommunications markets need to address. It recommends pro-active policy measures designed to maximize competition in the U.S. market while simultaneously guarding against anticompetitive behavior.

The Accounting Rate Regime

A major problem with the current regulatory regime – and hence a threat to the benefits of the global telecom revolution — is the accounting rate system. This archaic system of transfer payments between international service providers is a vehicle for foreign monopolies and PTOs (public telephone operators) to extract billions in non-cost based overpayments for firms and consumers. These rents can then be used by foreign firms to compete in the United States, potentially at a short-term loss, to harm U.S. firms and consumers in the long run. This system threatens competition in the United States and leaves U.S. firms vulnerable to price squeezes at the hands of dominant foreign carriers.

There is widespread agreement that accounting rates remain significantly higher than the costs of providing international telephone services. The Economic Strategy Institute estimates that on average, 85 percent of the weighted accounting rate charge is non-cost-based in 1996. It is important to note that accounting rates have been declining since the mid-1980s, due to innovations in the international services market as well as current U.S. policies. While the decline has been modest in some cases, accounting rates for some countries have declined by 70 percent.

The overall impact of accounting rates is tremendous. The U.S. telecommunications industry exported \$4.9 billion in 1995 to foreign firms and an estimated \$5.3 billion in 1996 in the form of settlement payments. Above-cost accounting rates represent a serious and growing problem for the U.S. telecom industry. This year, more than \$5 billion (and potentially \$6 billion) will be shipped from U.S. consumers to foreign monopolies through above-rate accounting rates.

While competition overseas and new international settlement arrangements are expected to contribute significantly to a reduction in accounting rates, structural problems created by the accounting rate regime will remain. Many foreign governments are actively pursuing policies designed to minimize alternative international traffic arrangements and services and hence preserve above-cost accounting rates. Imbalances in traffic will continue to grow as competition becomes even more vigorous in the U.S. long distance market. This will lead to continued growth of the telecommunications service deficit, and an increased chance of price squeezing in a liberalized global market.

The Potential for Price Squeeze Behavior through the International Market

A price squeeze occurs when a strong firm or firms in one industry act to squeeze the price of a major product in an industry, primarily with the intent of making it difficult for a rival to compete. This may happen in two ways. First, a firm can lower prices below the average cost of production for a substantial period of time. This makes it difficult for a rival to exist because profits decline dramatically or disappear. Second, a firm can raise the cost of an intermediate product or service -- one example in telecommunications is the interconnection charge -- so that the price that a rival charges does not provide for as much profit as the rival might have obtained without such high charges.

Net outpayments to firms with significant market power create opportunities for anticompetitive behavior in otherwise open and competitive domestic telecommunications markets. In particular, above-cost accounting rates on routes where foreign firms maintain significant market power, raise the specter of price squeeze in domestic telecom markets through foreign subsidiaries.

The price squeeze problem faced by firms in the inter-LATA, domestic market, will soon be seen in the international market. Foreign firms with significant market power maintain the ability to raise the price of inputs for U.S. firms via the accounting rate mechanism. As foreign firms with monopoly power overseas enter the U.S. market, the problem of the price squeeze can become more acute.

For example, assume that Telefonica de España (Telefonica) creates a separate affiliate to provide inter-LATA domestic and international services in the United States. This affiliate receives an infusion of cash from Telefonica and competes with other long distance providers on the U.S. - Spain route. Telefonica could use its monopoly power to protract or raise already above-cost accounting rates (i.e. include some of the costs of its U.S. affiliate in the charge), and then underprice competitors along domestic and international service routes. In addition, Telefonica could replicate this pattern on other routes where it maintains a monopoly in the foreign country, e.g., Argentina.

If the market for foreign international facilities-based communications is competitive (and assuming no capacity restraints exist), then foreign firms cannot raise prices without losing business and hence no price squeeze can occur. However, there are very few countries where facilities-based competition exists, and it is unlikely that countries receiving huge net settlement payments from the United States will exhibit competitive markets within the next ten years. Even in the most optimistic scenario, true competition in Europe's market will not take hold until well after the start of the next decade – later in developing countries.

The Benefits of Cost-Based Benchmarking

The Economic Strategy Institute has created four detailed scenario-based models of the international market that forecasts acute problems arising from the international settlement system. The models examine four possibilities created by a pair of oscillating variables – competition and cost-based settlement benchmarks – to permit examination of price squeeze dangers in the U.S. market. Competition refers to the level of competition in a foreign country's public switched and alternative service international market A cost-based benchmarking system is one that reduces accounting rates to long-run incremental costs (LRIC). Each of these scenarios factor in changes in traffic flows, patterns, long-term demand, prices, competitive pressure abroad and in the United States, and the existence of cost-based benchmarks.

All of the assumptions used in the model are believed to be conservative, meant to underestimate the impact of regulations and the future of deficits. The models suggest that the United States will continue to face an expanding and ominous burden – imposed by foreign firms with market power – if existing benchmarks are not replaced with ones based on long run incremental costs. Conversely, the benefits of implementing a LRIC-based settlement benchmark are equally as great.

Lower Trade Deficits

While the United States runs a trade deficit with or without cost-based accounting rates, the cumulative deficit is \$30.30 and \$55.72 billion lower over the next nine years. Without cost-based accounting rates, the U.S. trade deficit in telecom services could eclipse \$11 billion in 2005 and \$78.78 billion from now until that time. Cost-based accounting rates could reduce the U.S. trade deficit by as much as \$6.19 billion per year.

• More Investment in the United States

Overall, \$59.58 billion in above-cost accounting rates could be saved over the next nine years. This is three times greater than the estimated cost of building local exchanges in the 20 largest metropolitan markets in the country. As much as 71 percent of this amount, \$42 billion, could be invested into local networks, wireless systems, satellite constellations, and the like. An extra \$5 billion in annual telecommunications investment would give an enormous boost to competition in all U.S. telecom markets.

Lower Prices in International Telecom

The models predict that consumers could see significant reductions in their international telephone bills even if a fraction of the accounting rate reductions were passed along to consumers. Even if U.S. firms pass along less than 29 percent of the settlement rate

reductions, consumers will save between \$10.6 and \$17.28 billion in the form of lower prices now until the year 2005 if cost-based accounting rates are implemented.

• Lower Prices in All Telecom Services

A long-term impact of anticompetitive behavior through price squeeze tactics could be higher prices in all telecom services. The \$78.78 billion that could be paid to foreign firms over the next nine years can substantially impact prices in the U.S. domestic market. While consumers may see a short-term windfall from the price squeeze, unabated price squeeze behavior will lead to accelerated consolidation in the telecom industry in the long run.

• A More Competitive U.S. Economy

The combination of all the effects mentioned above will create serious economic benefits for all U.S. manufacturing and service industries. Lower prices, greater competition, and more investment in the industry will translate into faster adoption, utilization, and roll-out of computer and communications technologies and hence a more productive and competitive U.S. economy. Previous studies have estimated that increased usage of broadband technologies could add 0.4 percent to annual U.S. productivity growth over the next 12 years. However, these types of productivity gains will only be realized if the U.S. telecommunications market is free of anticompetitive behavior.

Policy Recommendations

Just as the FCC is taking proactive measures to avert the possibility of cross-subsidization and price squeezing in the intra-Lata market, it should enact policies that eliminate the potential for price squeezing in the international services market while allowing the industry to develop according to market forces.

The accounting rate regime does not operate in a vacuum and nor can its regulation. U.S. policies on international simple resale, switched resale services such as call back services, GMPCS (global mobile personal communications services), U.S. foreign entry policy, and licensing global alliances are all interrelated and require examination. The goal of these policies must be to promote greater competitive and consumer price reductions while guarding against potential monopoly abuses.

The first priority of U.S. policymakers should be to secure a market opening agreement at the World Trade Organization's Negotiating Group on Basic Telecom, scheduled to conclude February 15, 1997. A pro-

10 • Reforming the Accounting Rate Regime

competitive agreement that opens markets to internal and foreign competitors will significantly reduce the problems associated with price squeezing.

However, a comprehensive WTO agreement will not suffice to eliminate the potential for price squeeze behavior in the U.S. market. Firms with dominant market power in their home market will continue to generate revenue from above-cost accounting rates and have the ability to apply them to their U.S. subsidiaries. Once international facilities markets are competitive, these regulations shall have exhausted their usefullness. Until that time, they are vital to consumers and to the development of competitive markets in the United States.

The Federal Communications Commission is currently revisiting its policies on accounting rates, specifically its benchmarks set in 1992, which – while successful in spurring accounting rate reductions – are far above-cost and do not significantly limit the potential for price squeeze. The FCC should adopt a country-specific benchmark ceiling for all countries that is not significantly greater than nine cents (a conservative estimate of average cost), and which declines in tandem with associated costs decreases. This benchmark should go into effect as soon as possible and no later than the beginning of 1998 as any delay would sanction foreign monopolies and governments to extract money from U.S. consumers and to slow the development of competitive telecommunications markets. Firms that refuse to enter into agreements at the Commission benchmark should be automatically moved to an "off-the shelf" cost-based accounting rate that are actually below the benchmark.

Above-cost accounting rates are a direct and unacceptable drain on U.S. resources and an unnecessary burden placed on U.S. consumers. If they are allowed to persist unfettered, they will be the instrument employed by foreign firms to practice anticompetitive behavior in the U.S. market, further harming consumers and impeding the development of healthy competition.

Introduction

The world is in the midst of an information revolution. While this phrase is overused and at times misapplied, the convergence of computer and communications industries presents the greatest opportunities for societal and industrial advance since the industrial revolution. It continues to provide major increases in productivity and efficiency, spur new industries, and permits a greater flow of ideas. Information, and information management, is rapidly becoming the crucial component of an industry's competitiveness in the global marketplace.

The convergence and globalization of information-based industries require governments to reevaluate traditional policy structures. The telecommunications business is increasingly a global business, with global firms and customers. No one company can supply the world's telecommunications needs, nor can the firms of one country provide the capital or expertise necessary for market competition in every aspect of these burgeoning industries. The growth and development of these industries makes international transactions, mergers, investments, joint ventures, and partnerships increasingly important to the establishment of a world-class, competitive telecommunications industry.

While the telecommunications industry continues to evolve into a global industry, regulations remain parochial and outdated. To their credit, regulators around the globe are in the process of devising policies to maximize the benefits of this revolution. This is not to say that deregulation alone is the best policy. On the contrary, most countries maintain national monopolies that will exhibit significant market power for the future. Regulations for the future need to walk a fine line between encouraging competition and the globalization of the industry while and resisting the anticompetitive aspects of the still-present monopoly regulatory structure. Only if this balance is maintained will U.S. consumers and firms benefit from a global and competitive telecom industry.

The removal of regulatory barriers does not necessarily correlate with greater competition, neither here nor abroad. Many PTOs will maintain significant market power in their home country long after the introduction of competition. This reality raises questions of the ability of firms operating in both competitive and non-competitive markets to leverage their position in one to the detriment of firms and consumers in another.

The international market for telecommunications services is in flux both on the supply and demand side. More users are demanding low cost, high-quality seamless networks and suppliers are finding innovative ways to avoid traditional regulatory structures that promote high tariffs. While more recent services and arrangements (international simple resale, switched resellers, global alliances, etc.) are challenging traditional pricing and service arrangements, the public switched telephone network and hence, accounting rates, are and will remain the most important arrangement for carrying international telephony services. With its demise in doubt, regulators need to determine how to best ensure that the accounting rate regime is not manipulated to harm U.S. consumers.

A companion study by Dr. Bob Cohen, Adjunct Fellow at the Economic Strategy Institute, reviewed the economic literature of the price squeeze and confirmed that foreign telecom service firms with home market power who enter the U.S. market have the ability to harm competition in the "downstream" industry. In this study, the Economic Strategy Institute takes a deeper look at the international telecom market – particularly the accounting rate system — and quantifies the degree to which foreign firms can leverage their power in the U.S. market. It reviews present regulations and their ability to thwart price squeezing by foreign subsidiaries and recommends policy changes to maximize competition while protecting against anticompetitive abuses.

Cohen, Bob. International Message Telephone Service and Competition: An Economic Analysis of Price Squeezes and Its Implication for International Settlement Rates and Rules on Foreign Entry into the U.S. Communications Industry. (Washington DC: Economic Strategy Institute, February 1997)

The International Telecom Market and the Role of Accounting Rates

Changing Market Dynamics

The international telecommunications market has undergone significant changes over just the last ten years. Traditionally, international telephony traffic has been transmitted and terminated over the public switched telephone network (PSTN). The PSTN simply refers to the classic phone network residential customers are accustomed to. Calls that are carried over this system are subject to the accounting rate charge described in detail in the following section.

Several current and pending innovations and bypass mechanisms have the potential to challenge the 100 years of predominance of the PSTN and the viability of the accounting rate regime. These include international value-added networks (IVANs), two-way international simple resale (ISR), global seamless wireline services, global mobile personal communications service (GMPCS), and switched resale services.² Each of these services, however, is of course subject to regulations, and hence is not a panacea for the accounting rate regime. As the International Telecommunications Union recently noted,

"How new technologies affect prices largely depends upon how existing carriers can use such capacity; on whether new players can own or lease the international facilities they desire; on the terms for carriers in one country to connect their facilities to foreign networks; and on the extent to which operators are obliged to pass on the benefits of technological change to customers as well as shareholders: in a word, on regulation."

For a detailed analysis of each of these alternative services, See., International Telecommunications Union & Telegeography, Inc. Direction of Traffic, 1996: Trends in International Telephone Tariffs. (International Telecommunications Union: Geneva, November 1996), p. 15-25.

International Telecommunications Union & Telegeography, Inc. Direction of Traffic, 1996: Trends in International Telephone Tariffs. (International Telecommunications Union: Geneva, November 1996), p. 15.

Despite the benefit of avoiding the accounting rate regime for consumers, many, in fact most, countries have enacted policies that limit alternatives. Two-way ISR opportunities are only authorized on routes between six countries.⁴ GMPCS systems, once envisioned as bypassing the incumbent wireline provider completely, is increasingly being forced, via regulations, to change its plans as not to damage the incumbent monopoly. Call back services are banned in over 50 countries and the target of possible value added taxes in Europe. All of these innovations and services are impacted by regulations and hence, their effect on prices and competition is relative to commitment countries make to deregulating the international telecom market.

The International Settlement System

Around the world, telecom carriers are not permitted to provide end-to-end international services (services provided directly to customers in both the destination and origination countries). Typically, international service providers must enter into operating agreements with firms in other countries to complete international calls. These operator-to-operator agreements have been in existence since the inception of international calling. The two firms must establish the accounting-rate charges they impose upon one another for the termination of an international call. When an international call is made, the telecom firm in the originating country must pay the services provider in the destination country for directing the call to its final destination (the originating firm bills the caller and retrieves those charges). The originating carrier must pay the second carrier an accounting rate that is half the negotiated settlement rate.

This system is a byproduct of the government-owned monopolies era. Issues of cost-based rates and cost allocation were largely ignored. PTOs, operating in monopoly environments, were not concerned with the precise costs in what has traditionally been considered a luxury market.

The introduction of competitive forces in some countries and not others has strained this system and created tension between the United States and its trading partners. In an environment of asymmetrical competition, the accounting-rate system can be manipulated unjustly by monopolies and firms with dominant market power to extract profits from competitive firms and, hence, to shift costs from U.S. consumers to foreign consumers.

The United States, with the most competitive international long-distance market in the world, has been suffering the adverse effects of the current accounting rate system. In the asymmetrical environment, the

These countries are Canada, United Kingdom, Sweden, Finland, Australia, and New Zealand. The United States has been hesitant to authorize two-way ISP. It is now available on four routes: Canada, United Kingdom, Sweden, and New Zealand. Applications for Finland and Australia are pending.